Amendment to the Claims

1. (Original) A composition comprising a ceramic of formula 1 below:

$$Pb_{(1-z)}M_{z}(Mg_{1/3}Nb_{2/3})_{x}(Zr_{y}Ti_{1-y})_{1-x}O_{3}$$
(1)

wherein M is selected to be either Sr or Ba, x is selected to be between about 0.1 and about 0.7, y is selected to be between about 0.20 and about 0.70, and z is selected to be between about 0.02 and about 0.1.

- 2. (Original) The composition of claim 1 comprising a dopant selected from the group consisting of: MnO₂, Ni₂O₃, TeO₂, MoO₃, Nb₂O₅, Ta₂O₅, Y₂O₃, CoCO₃, Sm₂O₃, and mixtures thereof.
- 3. (Original) The composition of claim 2 containing between about 0.2 and about 0.4 wt % MnO₂ and between about 1.4 and about 1.8 wt % Nb₂O₅.
 - 4. (Original) The composition of claim 1 wherein M is Ba.
 - 5. (Original) The composition of claim 1 wherein M is Sr.
- 6. (Original) The composition of claim 5 wherein z is selected to be between about 0.4 and about 0.7.
- 7. (Original) The composition of claim 1 wherein x is selected to be between about 0.2 and about 0.4
- 8. (Original) The composition of claim 7 wherein y is selected to be between about 0.2 and about 0.50.
- 9. (Original) The composition of claim 1 wherein y is selected to be between about 0.2 and about 0.50.

10. (Original) The composition of claim 9 wherein z is selected to be between about 0.04 and about 0.08.

11. (Original) The composition of claim 1 wherein z is selected to be between about

0.04 and about 0.08.

12. (Original) The composition of claim 1 having a density between about 7.65 and

about 7.8 g/cc.

13. (Original) A piezoelectric element comprising the composition of claim 1 and

having at least two electrodes formed thereon.

14. (Original) The composition of claim 1 exhibiting a mechanical quality factor Q_m

of at least 900.

15. (Original) The composition of claim 1 exhibiting a relative permittivity (ϵ) of at

least 2000 F/m.

16. (Original) The composition of claim 1 exhibiting a relative permittivity (ε) of at

least 2500 F/m.

17. (Original) The composition of claim 1 exhibiting a piezoelectric strain constant

 (d_{33}) of at least 300 PC/N.

18. (Original) The composition of claim 1 provided as a piezoelectric ceramic.

19. (Original) The composition of claim 1 provided as a ferroelectric ceramic.

20-31. (Canceled)